

croachments of absolutism upon popular rights," but also "to describe the long-continued struggle of the many to throw off the yoke of the few, to emphasise the corrupting influence of the union between Church and State, to illustrate once more the blighting effects of superstition, ignorance, blind obedience, unjust laws confiscation under the disguise of unequal taxes, and the systematic plunder, year by year, of the weaker classes by the stronger." With inquiry, much just indignation and naïve ethics have been mingled. The academic historian and the case-hardened political scientist will find much to censure in the form which the history of France has taken in Mr. Watson's hands; but the unsophisticated reader who wishes to acquire a vivid picture of one of the most interesting stories of modern times will find the work a fascinating one. The author has thrown his whole heart into his task, and has not minced his words in the expression of his opinions. With a due measure of criticism, the book can be enjoyed.

NATURE-STUDY AND CHILDREN'S READERS.

Frances L. Strong, of the St. Paul Teachers' Training School, has embodied her practical experience as an instructress of children in a little series of volumes entitled, *All the Year Round: A Nature Reader*. The series is published by Ginn & Co., of Boston, and is divided into three parts: Autumn, Winter, and Spring. (Price, 30 cents each.) As the method of combining all the work of the primary curriculum with the work of reading is not as widely known as it should be by primary teachers in the schools of the small towns and cities, nor by parents, it is much to be wished that books of this character should be brought to the notice of the general public. "Nature Work," as it is called, has been greatly developed in the schools of the large cities, and all who wish to acquire familiarity with its principles can satisfy their desire in these books. The system is far from being an iron-clad one, and can be adapted by every person to the requirements of his special case, and to his special experience. The plan of instruction involves the gathering of the materials for each lesson by the teacher and the pupils. The material is then studied by means of the so-called "morning talk," which deals with some natural object that accords with the season. Each child examines a specimen of the plant or animal, new words are introduced, and the affinities of the different natural objects skilfully developed. The observation lesson is followed by a drawing lesson in which the child is required to reproduce with his pencil what he sees. Work in free-hand cutting and clay-modeling is an accompaniment. A spelling lesson and the reading proper then follow. The object of the series is not so much to furnish new reading matter as to "stimulate the thought, enlarge the vocabulary, and open the eyes of the children to the wonders of the world around them." The Autumn volume begins with the study of the familiar autumn plants with which our fields abound, and concludes with reflexions on insects, spiders, and the rodents. Instructions are given as to the preparations for the Winter work, which embraces studies of lime-stone, quartz, ocean life, coal, evergreens, and bits of anthropology. This section appropriately concludes with some work on evaporation. The volume on Spring deals with like appropriate scientific topics. The lessons are conversational, and quite varied in their interest, and much good poetry from current sources has been interwoven in the text; the classical poetry, however, has been little exploited, probably from its difficulty.

A similar but more elementary volume is *Nature's By-Ways, or Natural Science for Primary Pupils*, by Nellie Walton Ford, published by The Morse

Company, New York and Boston, and with illustrations from the great artists by Gertrude Morse. The type is clear and good, and many will find it more useful than the preceding volumes as a beginner's reader.

AN EXEMPLARY COURSE IN ELEMENTARY MATHEMATICS.

Two volumes of the excellent course in elementary mathematics published under the direction of M. Darboux, the distinguished mathematician and dean of the Faculty of Sciences at Paris, have already been mentioned in *The Open Court*. They were the *Arithmetic* of Jules Tannery and the *Plane Geometry* of Jacques Hadamard. Three other important volumes have been published in the series, and are of just the type with which mathematical instructors in America should become acquainted. They are the *Algebra* and *Plane Trigonometry* of M. C. Bourlet, and the *Cosmography* of M. M. Tisserand and H. Andoyer.

M. Bourlet's *Algebra* (548 pages, price 7 fr. 50c.) is very complete for an elementary work. The treatment of negative numbers and of the commutative, associative and distributive properties of operations is quite detailed. Functions of a single variable are discussed, and the graphical representation of the variation of a function explained. Some few notions of analytical geometry have been introduced, and the theory of derivatives, usually deferred to the calculus, is touched upon. The methods employed are such as admit of subsequent extension in mathematics, and assure economy of presentation in all later developments.

The same author has written the treatise on *Plane Trigonometry* (322 pages, price 6 fr.). The book begins with an exposition of the notions of vectors, equipollency, and so forth. An appendix for special students treats of the trigonometrical representation of imaginary quantities, the formula of Moivre, the roots of imaginary quantities, binomial equations, and cubic equations.

The *Cosmography* of M. M. Tisserand and H. Andoyer (370 pages, price 6 fr.) is virtually a text-book of astronomy. The book is concisely written, and is devoted to the science of the subject as contrasted with its fictions. The most recent investigations have been recorded. There are twelve excellent plates from photographs of the heavens. The history of astronomy and some special technical points of difficulty are treated in an appendix.

Two important volumes in the same series, a *Solid Geometry* by M. Hadamard and a text-book of *Mechanics* by M. Koenigs, are announced as in the press. Inasmuch as the system of mathematical instruction in France is now more completely and rationally organised than that of any other country, the methods of these text-books are deserving of the closest attention. The publishers are Armand Colin & Co., 5 rue de Mézières, Paris.

μκρκ.

BOOK NOTICES.

GRUNDPRINZIPIEN FÜR LÖSUNG DER SOCIALEN FRAGE. Verfasst in drei Gesprächs-abenden von G. Krause. Published by the author. New York.

The author of this book is obviously a serious man who burns with the desire to redeem suffering mankind from the evils of the present system of social wrongs. He has passed through many sore disappointments without losing courage to carry on a propaganda for the principles and methods by which he proposes to solve the difficult problem. He submitted the MS. of his book to C. H. Boppe, editor of the *Friedenker*, to Maximilian Grossman, former principal of the Workingmen's